REMARKS/ARGUMENTS

CLAIM REJECTIONS – 35 USC § 112

Claims 31-32 have been rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 31-32 have been amended to overcome the rejection.

CLAIM REJECTIONS – 35 USC § 102 & 103

Claims 1-3 and 11-12 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Ozawa et al. (PCT Publication WO 01/34658).

The Examiner has maintained the rejection set forth in the previous Office Action and now maintains that the use of "product-by-process" language does not adequately define over Ozawa.

Applicants traverse. While the Office Action correctly states that the determination of patentability is based on the product itself, not the process steps of a product-by-process claim, a requirement for a showing of criticality is in legal error. Applicants maintain that if one of skill in the art can understand that the process steps provide a unique structure, then that well understood structure—although not specifically recited—can serve as a basis to define over the prior art. See *e.g., In re Garnero,* 412 F2d 276, 279, 162 USPQ 221, 223 (CCPA 1979). Those skilled in the art readily appreciate that anionic polymerization techniques necessarily lead to the formation of polymer products that are unique from those prepared by lanthanide-based catalyst systems. In further support of this fact, the Declaration of Dr. Terrence E. Hogan is submitted herewith to corroborate this well-known fact.

PCT Publication No. WO 01/34658 - Ozawa

Claim 5 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ozawa (PCT Publication WO 01/34658). Claims 4 and 6-10 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ozawa, in view of Hergenrother (EP 0

801 078). Claim 10 has further been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ozawa and Hergenrother, in view of Vitus et al., (US Pat. No. 4,409,368).

Applicants traverse. While Applicants maintain that each of the dependent claims are separately patentable, Applicants contend that the claims are now patentable based upon their depending from claim 1, which as discussed above, has been established to be patentable.

U.S. Patent No. 6,451,935 - Schreffler

Claims 1-11 and 21-32 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Schreffler (U.S. Pat. No. 6,451,935) in view of Ozawa (PCT Publication WO 01/34658). Claims 8-9 and 26-27 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Schreffler (U.S. Pat. No. 6,451,935) in view of Ozawa (PCT Publication WO 01/34658) and Hall (U.S. Pat. No. 5,112,929). Claims 8-10 and 26-28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Schreffler (U.S. Pat. No. 6,451,935) in view of Ozawa (PCT Publication WO 01/34658) and Vitus (U.S. Pat. No. 4,409,368).

Applicants traverse. Applicants maintain that there is no teaching or suggestion to combine the teachings of Schreffler with those of Ozawa. In particular, Applicants maintain that the mere mention of isocyanates as useful functionalizing agents among dozens of other functionalizing agents taught by Schreffler does not provide adequate motivation or direction for one of skill in the art to use the terminating agents of Ozawa to functionalize the anionically-synthesized polymers of Schreffler. Moreover, Applicants maintain that when the level of ordinary skill in the art is properly considered, the terminating agents taught by Ozawa are not predictably transferred to terminate anionically-polymerized polymers as taught by Schreffler. Indeed, the claimed terminating agents (which are taught by Ozawa) are complex molecules including multiple functionalities. These various functionalities have the ability to change the overall reactivity of the molecules and the manner and/or ability of the molecule to react with reactive polymers. The mere fact that these molecules could be successfully reacted

with polymers prepared by lanthanide-based catalysts offers no guidance or predictability as to whether these molecules could be reacted with anionically-synthesized polymers. As an example, the presence of the alkoxysilane functionality complicates the issue above and beyond the use of simple isocyanates as taught by Schreffler. Alkoxysilane functionalities do not react with polymers synthesized by lanthanide-based catalysts. As a result, Ozawa was able to target the isocyanate functionality as a site where the reactive polymer could bind to the functionalizing agent. In contradistinction, anionically-synthesized polymers do react with alkoxysilane functionalities. This reaction, however, does not offer a mere alternative to a reaction at the isocyanate functionality. Instead, it could lead to side reactions that would frustrate the formation of the desired polymer. In order to support the Applicants' contention as to the level of skill in the art and what one of skill in the art may have predicted, the Declaration of Dr. Terrence E. Hogan is submitted herewith. This declaration unequivocally establishes that the teachings of Ozawa offer little guidance in predicting whether the claimed terminating agents could be employed to terminate anionically-synthesized polymers. Reconsideration of the rejections is respectfully requested.

CONCLUSION

It is respectfully submitted that all pending claims are in condition for allowance. Accordingly, Applicants request early and favorable reconsideration in the form of a Notice of Allowance.

If necessary to affect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to affect a timely response. Please charge any deficiency in fees or credit any overpayments to Deposit Account No. 06-0925 (Docket #: P02074US2A(P348)).

Respectfully submitted,

January 4, 2010
Date

/Arthur M. Reginelli/

Arthur M. Reginelli, Reg. No. 40,139
Attorney for Applicants
Renner, Kenner, Grieve,
Bobak, Taylor, & Weber
First National Tower
Fourth Floor
Akron, OH 44308
Phone: 330-376-1242
Fax: 330-376-9646